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**U.S. GEOLOGICAL SURVEY LIBRARY  
FIELD RECORDS COLLECTION  
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**WILLIAM JAMESON MAPEL**  
(1922 - )

NOTES, CORRESPONDENCE, PAPERS

1949 - 1977

(5.2 linear ft. and 12 map folders)

INVENTORY

By

Clay M. Martin  
U.S. Geological Survey Field Records Collection  
MS 914, Box 25046, Federal Center  
Denver, CO 80225-0046  
March 2011

Location of Field Notebooks: CS-5: 2-4

**GEOLOGY AND COAL RESOURCES OF THE BUFFALO-LAKE DE SMET AREA, JOHNSON AND SHERIDAN COUNTIES, WYOMING.  
1949-1951.**

<u>Item Number</u>	<u>Description</u>
NO-01376	W.J. Mapel and R.H. Dott, Jr. Two groups of field notebook pages with geologic notes and sketches and coal section, drill and auger hole, and photo data related to field investigation of the Buffalo-Lake De Smet area. 1949-1951.
NO-01377	W.J. Mapel, R.H. Dott, Jr., and R.K. Hose. Two groups of field notebook pages with geologic notes and sketches and plane-table, stratigraphic section, fossil, and sample data related to field investigation of the Buffalo-Lake De Smet area. 1949-1951.
NO-01378	W.J. Mapel, C.R. Lewis, A.A. Meyerhoff, and C.A. Sandberg. Two groups of field notebook pages with geologic notes and sketches and coal section data related to field investigation of the Buffalo-Lake De Smet area. 1950-1951.
NO-01379	Expandable envelope with two folders: <ul style="list-style-type: none"> <li>- Folder 1. Group of drill hole logs and miscellaneous drilling information related to field investigation of the Buffalo-Lake De Smet area.</li> <li>- Folder 2. Group of correspondence, referred fossil reports, stratigraphic section diagrams, and miscellaneous data related to field investigation of the Buffalo-Lake De Smet area.</li> </ul>
NO-01380	Document box with six folders of research materials and data related to field investigation of the Buffalo-Lake De Smet area, including correspondence, coal mine records, core descriptions and other drill hole data, coal analysis reports, sketch maps, and coal thickness and reserve data.
NO-01381	Expandable envelope with approximately 60 black and white aerial photographs, many with annotations, covering the Lake De Smet area. Also included are three sheets with photo location information. 1943 survey.
MA-00331	Map folder with 18 items: <ul style="list-style-type: none"> <li>- Draft version of a stratigraphic section diagram showing Mesozoic and Paleozoic rocks in the Buffalo-Lake De Smet area.</li> <li>- Eight sheets with draft versions of geologic maps of the Buffalo-Lake De Smet area.</li> <li>- Draft version of a stratigraphic section diagram showing pre-Tertiary rocks in the Bull Creek area, Johnson County, Wyoming.</li> <li>- Stratigraphic correlation diagram for the Mesa Verde Formation.</li> <li>- Sheet with three stratigraphic section diagrams showing coal beds in the vicinity of the Mitchell and Monkre Mines.</li> </ul>

- Sheet with draft version of a geologic map and profile of the Buffalo-Lake De Smet area.
- Two sheets with draft versions of a structure contour map of the Buffalo-Lake De Smet area.
- Unidentified stratigraphic section diagram.
- Two sheets with draft versions of unidentified geologic maps.

MA-00332 Map folder with 35 items:

- Sheet with draft version of an index map for the Buffalo-Lake De Smet area.
- Twenty-four sheets with coal bed section and correlation diagrams.
- Two sheets with draft versions of fence diagrams showing correlation of coal beds near Lake De Smet.
- Seven sheets with draft versions of structural cross-section diagrams of the Buffalo-Lake De Smet area.
- Sheet with draft version of a geologic map of the Lake De Smet area, showing drill hole locations.

MA-03066 Map folder with 22 items:

- Five plane-table sheets with data related to mapping surveys in the Buffalo-Lake De Smet area.
- Three photomosaic indexes showing flight lines for a 1943 aerial photo survey of the Buffalo-Lake De Smet area.
- Seven annotated black and white aerial photos showing the Buffalo-Lake De Smet area.
- Seven sketch maps on topographic map bases showing geology in the Buffalo-Lake De Smet area.

MA-03067 Map folder with five items:

- Sheet with topographic map base and added geology for the Antelope Basin area, Wyoming.
- Sheet with topographic map base and added geology for the Ucross area, Wyoming.
- Sheet with a topographic map base and added geology for the Red Grade Spring-Little Close Creek area, Wyoming.
- Sheet with a topographic map base and added geology for the coal area west of Buffalo, Wyoming.
- Sheet with a topographic map base and added geology for the coal area east of Buffalo, Wyoming.

Published as: U.S. Geological Survey. Circular 228. 1953.

Published as: U.S. Geological Survey. Coal investigations map C-23. 1954.

Published as: U.S. Geological Survey. Bulletin 1078. 1959.

**TERTIARY GEOLOGY OF THE GOOSE CREEK DISTRICT, CASSIA  
COUNTY, IDAHO, BOX ELDER COUNTY, UTAH, AND ELKO COUNTY,  
NEVADA. 1951-1952.**

- NO-02296      W.J. Mapel, J.E. Conkin, and J.N. Babcock. Group of field notebook pages with geologic notes and sketches and aerial photo, sample, stratigraphic section, and survey station data related to field investigation of the Cotton Thomas Basin 15' quadrangle, Utah-Idaho. 1952.
- NO-02297      W.J. Mapel, W.J. Hall, Jr., N.M. Denson, D.C. Duncan, and J.R. Gill. Group of field notebook pages with geologic notes and sketches and aerial photo, sample, stratigraphic section, and survey station data related to field investigation of the Goose Creek District, Idaho, and the State Line Mine, Utah. 1951.
- NO-02298      W.J. Mapel. Field notebook with geologic notes and sketches and stratigraphic section data related to field investigation of the Goose Creek District. 1952.
- NO-02299      W.J. Mapel. Field notebook with geologic notes and sketches and aerial photo, sample, stratigraphic section, and survey station data related to field investigation of the Goose Creek District. 1952.
- NO-02300      W.J. Mapel. Field notebook with geologic notes and sketches and aerial photo, sample, and auger hole data related to field investigation of the Goose Creek District. 1952.
- NO-02301      W.J. Mapel, J.E. Conkin, and W.J. Hail. Group of field notebook pages with geologic notes and sketches and aerial photo, sample, stratigraphic section, auger hole, and survey station data related to field investigation of the Goose Creek District. 1952.
- NO-02302      Document box with approximately 130 black and white aerial photographs, some with annotations, covering the Goose Creek District and vicinity. 1952 survey.
- NO-02303      Document box with approximately 130 black and white aerial photographs, some with annotations, covering the Goose Creek District and vicinity. Also included is a photomosaic index. 1952 survey.
- NO-02647      Two expandable envelopes with three folders of research materials and data related to field investigation of the Goose Creek District, including correspondence, industry reports, and sample and fossil analysis data.
- MA-03068      Map folder with 68 items:
  - Six sheets with draft versions of diagrams showing thickness and radioactivity of carbonaceous shales in the Goose Creek District.
  - Six sheets with draft versions of diagrams showing areas underlain by carbonaceous shales in the Goose Creek District.

- Six sheets with draft versions of diagrams showing correlation of rock units exposed in the Goose Creek District.
- Six sheets with draft versions of index maps for the Goose Creek District.
- Seven sheets with draft versions of diagrams showing stratigraphic position of carbonaceous shale zones in the Salt Lake Formation, Goose Creek District.
- Three sheets with draft versions of diagrams showing uranium content in carbonaceous shales of the Goose Creek District.
- Seven sheets with draft versions of structure contour maps of the Goose Creek District.
- Twenty-six plat maps showing property ownership and surface features in the Goose Creek District.
- Plane-table sheet with survey points for mapping in the Goose Creek District.

MA-00485 Map folder with 24 items:

- Five sheets with draft versions of diagrams showing thickness and uranium content of carbonaceous shales in the Salt Lake and Payette Formations, Goose Creek District.
- Five sheets with draft versions of diagrams showing correlation of beds in the Salt Lake and Payette Formations, Goose Creek District.
- Fourteen sheets with draft versions of geologic and structure maps and geologic cross sections, Goose Creek District.

MA-00486 Map folder with 15 items:

- Sheet with draft version of a diagrammatic sketch showing aerial perspective view of the southern half of the Goose Creek District.
- Sheet with draft version of a reconnaissance map showing radioactive lignite and carbonaceous shale zones in rock units of the Goose Creek District.
- Sheet with draft versions of stratigraphic section diagrams showing thickness and uranium content of carbonaceous shale and lignite in the Salt Lake Formation, Goose Creek District.
- Sheet with draft version of a stratigraphic section diagram showing thickness and uranium content of carbonaceous shale and lignite in the Payette Formation, Goose Creek District.
- Two sheets with draft versions of detailed stratigraphic section diagrams of the Barrett zone, central Goose Creek District.
- Sheet with draft version of stratigraphic section diagrams showing thickness and uranium content of carbonaceous shale beds in core holes, Goose Creek District.
- Two sheets with draft versions of selected stratigraphic section diagrams showing thickness and uranium content of carbonaceous shales and lignite beds in the Salt Lake and Payette Formations, Goose Creek District.
- Sheet with draft version of a diagram showing correlation of Salt Lake and Payette Formation beds, Goose Creek District.
- Reverse-image copy of a geologic map of the Goose Creek District.
- Three sheets with draft versions of a structural contour map of the Goose Creek District.

- Sheet with draft version of a diagram showing structure and data points in an unidentified area.

Published as: U.S. Geological Survey. Bulletin 1055-H. 1959.

## **GEOLOGY OF THE LOWER CRETACEOUS INYAN KARA GROUP, BLACK HILLS, WYOMING-SOUTH DAKOTA. 1954-1958.**

- NO-02635      W.J. Mapel and C.L. Pillmore. Two groups of field notebook pages with geologic notes and sketches and stratigraphic section data related to field investigations in the Devils Tower, Inyan Kara Mountain, and Nefsy Divide 15' quadrangles, Wyoming. 1956.
  
- NO-02636      W.J. Mapel and C.L. Pillmore. Two groups of field notebook pages with geologic notes and sketches and stratigraphic section data related to field investigations in the Inyan Kara Mountain and Nefsy Divide 15' quadrangles and other areas in Wyoming and South Dakota. 1956.
  
- NO-02637      W.J. Mapel and C.L. Pillmore. Two groups of field notebook pages with geologic notes and sketches and stratigraphic section data related to field investigations in the Cedar Top, Inyan Kara Mountain, Nefsy Divide, Newcastle, and Upton 15' quadrangles and other areas in Wyoming and South Dakota. 1957.
  
- NO-02638      W.J. Mapel and C.L. Pillmore. Two groups of field notebook pages with geologic notes and sketches and stratigraphic section data related to field investigations in the Inyan Kara Mountain, Nefsy Divide, Newcastle, and Upton 15' quadrangles and other areas in Wyoming and South Dakota. 1958.
  
- NO-02639      W.J. Mapel and C.L. Pillmore. Group of field notebook pages with geologic notes and sketches and stratigraphic section data related to field investigations in the Inyan Kara Mountain and Upton 15' quadrangles and other areas in Wyoming and South Dakota. 1958-1959.
  
- NO-02640      Document box with three folders of heavy mineral data sheets with descriptions of stream sediment samples from the Black Hills, South Dakota and Wyoming.
  
- NO-02641      Expandable envelope with two folders of heavy mineral data sheets with descriptions of samples derived from stream sediments in the Black Hills, South Dakota and Wyoming.
  
- NO-02642      Expandable envelope with data related to samples taken in the Black Hills of South Dakota and Wyoming, including pebble and clay mineral descriptions and analysis and microscopic thin-section point counts.
  
- NO-02643      Expandable envelope with two folders of size analysis data related to samples

taken in the Black Hills, South Dakota and Wyoming.

- NO-02644 Document box with three folders of size analysis data related to samples taken in the Black Hills, South Dakota and Wyoming.
- NO-02645 Expandable envelope with miscellaneous research materials and field data related to field investigation of the Inyan Kara Group, including fossil, size analysis, and chemical analysis data. Also included is a progress report on work done in the eastern Black Hills in 1956 by K.M. Waage.
- NO-02646 Expandable envelope with three folders:
- Folder 1. Logs for nine Atomic Energy Commission drill holes in the Black Hills, with location map and sheet with sediment grain-size data.
  - Folder 2. Logs for 13 Atomic Energy Commission drill holes in the Black Hills, with location map.
  - Folder 3. Logs for 129 Atomic Energy Commission drill holes in the Black Hills, with two location maps.
- NO-06165 Expandable envelope with two groups of field notebook pages with geologic and stratigraphic section notes by W.J. Mapel and C.S. Robinson related to field investigations in Crook and Weston Counties, Wyoming, including the Devils Tower, Inyan Kara Mountain, and Newcastle 15' quadrangles. 1954-1955.
- NO-06166 Expandable envelope with two groups of field notebook pages with geologic, stratigraphic section, fossil, survey, and water sample notes by W.J. Mapel related to field investigations in the Beulah, Devils Tower, Inyan Kara Mountain, and the Newcastle, Oshoto, Sundance, and Upton 15' quadrangles. 1954-1956.
- NO-06167 Expandable envelope with two folders of stratigraphic section descriptions for the Inyan Kara Group, Black Hills, South Dakota and Wyoming.
- NO-06168 Document box with three folders of stratigraphic section descriptions for the Inyan Kara Group, Black Hills, South Dakota and Wyoming.
- NO-06169 Expandable envelope with two folders of ostracod descriptions for specimens from the Inyan Kara Group, Black Hills, South Dakota and Wyoming.
- NO-06170 Expandable envelope with group of stratigraphic section diagrams for Inyan Kara Group exposures in the Black Hills, South Dakota and Wyoming.
- MA-00966 Map folder with seven items:
- Copy of the Devils Tower 15' quadrangle, Wyoming, with annotations.
  - Copy of the Alva 15' quadrangle, Wyoming, with annotations.
  - Copy of the Nefsy Divide 15' quadrangle, Wyoming, with annotations.
  - Copy of the Mona 15' quadrangle, Wyoming-Montana, with annotations.
  - Copy of the Beulah 15' quadrangle, Wyoming-South Dakota,

- with annotations.
- Reproduction of the Newcastle 15' quadrangle, Wyoming, enlarged to a scale of 1:48,000, with annotations.
- Reproduction of the Upton 15' quadrangle, Wyoming, enlarged to a scale of 1:48,000, with annotations.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-218. 1959.

Published as: U.S. Geological Survey. Bulletin 1121-E. 1963.

Published as: U.S. Geological Survey. Bulletin 1121-M. 1963.

Published as: U.S. Geological Survey. Bulletin 1141-N. 1963.

Published as: U.S. Geological Survey. Bulletin 1161-C. 1964.

Published as: U.S. Geological Survey. Bulletin 1181-J. 1964.

Published as: U.S. Geological Survey. Oil and gas investigations map OM-191. 1959.

## **GEOLOGIC RECONNAISSANCE OF HAWLEY MOUNTAIN, LOST RIVER RANGE, AND OTHER AREAS IN IDAHO. 1964-1970.**

- NO-06171      Expandable envelope with group of field notebook pages with geologic, stratigraphic section, aerial photo correlation, sample, and fossil data related to field investigation in the Lost River Range, Idaho, including the Borah Peak 30' quadrangle, the Arbon, Diamond Peak, Doublespring, Edie Ranch, Hawley Mountain, Mackay, May, Morrison Lake, and Scott Peak 15' quadrangles, and the Clayton, Grand View, and Lone Pine Peak 7.5' quadrangles. 1964-1970.
- NO-06172      Expandable envelope with two folders of notes, correspondence, and laboratory reports related to fossil occurrences in the Lost River Range.
- NO-06173      Expandable envelope with group of stratigraphic section diagrams, correlation diagrams, and location maps related to field investigation of Mississippian age and younger rocks in the Lost River Range.
- NO-06174      Expandable envelope with group of laboratory reports and correspondence, mechanical and chemical analysis data, and microscopic thin-section descriptions related to field investigation in the Lost River Range, Idaho.
- NO-06175      Expandable envelope with group of stratigraphic section descriptions and diagrams for Devonian and Silurian-Devonian rocks in the Lost River Range area, Idaho.



- NO-06176 Expandable envelope with annotated draft copy of a 157-page report entitled "Geology of the Hawley Mountain quadrangle, Custer, Butte, and Lemhi Counties, Idaho", by W.J. Mapel and K.L. Shropshire. A handwritten note on the cover page reads "Draft-never submitted". 1967.
- MA-00967 Map folder with 27 items:
- Thirteen sheets with draft versions of stratigraphic section diagrams from the Lost River Range.
  - Two sheets with draft versions of index maps for the Lost River Range and the Hawley Mountain 15' quadrangle.
  - Sheet with draft version of a diagram showing stratigraphic position of fossils collected in the Hawley Mountain 15' quadrangle.
  - Two annotated copies of the Hawley Mountain 15' quadrangle.
  - Two annotated copies of the Doublespring 15' quadrangle.
  - Annotated copy of the Borah Peak 30' quadrangle.
  - Six sheets with draft versions of explanations for geologic maps and diagrams of the Hawley Mountain-Lost River Range area.

Published as: U.S. Geological Survey. Geologic quadrangle map GQ-464. 1965.

Published as: U.S. Geological Survey. Professional paper 575-C. 1967.

Published as: U.S. Geological Survey. Professional paper 600-D. 1968.

Published as: U.S. Geological Survey. Miscellaneous field studies map MF-546. 1973.

**COAL GEOLOGY OF THE NORTHERN POWDER RIVER BASIN,  
SHERIDAN AND JOHNSON COUNTIES, WYOMING, AND BIG HORN  
AND ROSEBUD COUNTIES, MONTANA. 1973-1977.**

- NO-06360 W.J. Mapel, B.W. Dean, and others. Group of field notebook pages with geologic notes and sketches related to field investigations in the Banner and Buffalo Run Creek 7.5' quadrangles, Wyoming. No date.
- NO-06361 W.J. Mapel. Group of field notebook pages with geologic notes and stratigraphic section and sample data related to field investigations in the Bar N Draw 7.5' quadrangle, Wyoming-Montana. 1973.
- NO-06362 W.J. Mapel and B.W. Dean. Group of field notebook pages with geologic notes and stratigraphic section and sample data related to field investigations in the Verona and Horse Hill 7.5' quadrangles, Wyoming. 1974.
- NO-06363 W.J. Mapel. Group of field notebook pages with geologic notes and stratigraphic section and sample data related to field investigations in the Ucross and Ulm 7.5' quadrangles, Wyoming. 1976-1977.

- NO-06364 W.J. Mapel. Field notebook pages with geologic notes and stratigraphic section and sample data related to field investigations in the Birney 7.5' quadrangle, Montana. 1975.
- NO-06365 W.J. Mapel. Group of field notebook pages with geologic notes and stratigraphic section and sample data related to field investigations in the Pine Butte School and Stroud Creek 7.5' quadrangles, Montana. 1975-1976.
- MA-00997 Map folder with 84 items:
- Copy of the Buffalo Run Creek 7.5' quadrangle, Wyoming, reproduced on drafting film and sectioned into four parts, with geologic annotations.
  - Copy of the Ulm 7.5' quadrangle, Wyoming, reproduced on drafting film and sectioned into four parts, with geologic annotations.
  - Copy of the Verona 7.5' quadrangle, Wyoming, reproduced on drafting film and sectioned into four parts, with geologic annotations.
  - Copy of the northern half of the Ucross 7.5' quadrangle, Wyoming, reproduced on drafting film and sectioned into two parts, with annotations.
  - Copy of the northern half of the Horse Hill 7.5' quadrangle, Wyoming, reproduced on drafting film and sectioned into two parts, with annotations.
  - Two sheets with draft versions of stratigraphic section diagrams showing coal beds in the northern Powder River Basin.
  - Geologic map of the Ucross area, Wyoming, with unidentified data points.
  - Twenty-nine sheets with electric log data for drill holes in the northern Powder River Basin.
  - Nine sheets with coal analysis data for the northern Powder River Basin.
  - Twenty strip logs with drill hole data for the northern Powder River Basin.
  - Copy of the Verona 7.5' quadrangle, with annotations.
  - Sheet with geologic sketch map of the northern part of the Ucross 7.5' quadrangle, Wyoming.
  - Sheet with geologic sketch map of the northern part of the Horse Hill 7.5' quadrangle, Wyoming.
  - Four sheets with fossil descriptions for specimens from the Big Horn 15' quadrangle, Wyoming.
- MA-00998 Map folder with 32 items:
- Two partial copies of the Cedar Canyon 7.5' quadrangle, with annotations.
  - Copy of the Bar N Draw 7.5' quadrangle, Wyoming-Montana, reproduced on drafting film and sectioned into four parts, with annotations.
  - Copy of the Pine Butte School 7.5' quadrangle, Montana, reproduced on drafting film and sectioned into four parts, with annotations.
  - Eight strip logs with drill hole data for the northern Powder River Basin.
  - Sheet with electrical log data for drill holes in the northern Powder River Basin.
  - Envelope with group of stratigraphic section diagrams for the northern Powder River Basin.

- Group of nine sheets of coal sample analysis data for the northern Powder River Basin.
- Seven sheets with draft versions of coal bed correlation diagrams for the northern Powder River Basin.
- Map of drill hole locations for the Acme-Kleenburn area, Wyoming.
- Map showing coal leases, drill holes, and coal outcrops in the vicinity of the Badger Creek Mine, Wyoming.
- Sheet with coal bed correlation diagram for the Ash Creek Project.

MA-00999 Map folder with 63 items:

- Copy of the Birney 7.5' quadrangle, Montana, reproduced on drafting film and sectioned into four parts, with annotations.
- Thirty-eight strip logs with drill hole data for the northern Powder River Basin.
- Seventeen sheets with electrical logs data for the northern Powder River Basin.
- Copy of the Lacey Gulch 7.5' quadrangle, Montana, with annotations.
- Partial copy of the Browns Mountain 7.5' quadrangle, Montana, with annotations.
- Group of seven sheets with field notes and data related to coal investigations in the northern Powder River Basin.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-731. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-762. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-763. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-792. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-813. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-814. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-822. 1976.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-832. 1977.

Published as: U.S. Geological Survey. Open-file report 77-292. 1977.

Published as: U.S. Geological Survey. Miscellaneous field investigations map MF-1014. 1978.

Published as: U.S. Geological Survey. Open-file report 78-030. 1978.

Published as: U.S. Geological Survey. Open-file report 78-037. 1978.

Published as: U.S. Geological Survey. Open-file report 78-038. 1978.

Published as: U.S. Geological Survey. Open-file report 78-039. 1978.

Published as: U.S. Geological Survey. Open-file report 78-455. 1978.

Published as: U.S. Geological Survey. Open-file report 78-652. 1978.

Published as: U.S. Geological Survey. Open-file report 78-793. 1978.